GOVERNMENT OF INDIA
NON-CONVENTIONAL ENERGY SOURCES
LOK SABHA

UNSTARRED QUESTION NO:3530
ANSWERED ON:12.12.2002
USE OF SOLAR ENERGY
DILEEP SANGHANI

Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) whether use of solar energy is far less in comparison to the capacity available;

(b) if so, the reasons therefor;

(c) the steps being taken by Government to popularise the solar energy in the country; and

(d) the details of schemes sanctioned for the State of Gujarat?

Answer

MINISTER OF STATE FOR NON-CONVENTIONAL ENERGY SOURCES (SHRI M. KANNAPPAN)

(a)&(b) : Solar energy can be used through two principal routes: the thermal route and the photovoltaic route. Both routes are relevant and important for India. The Indian progamme on solar energy is one of the largest national programmes in the world.A number of solar devices have been developed for different applications and are being installed all over the country. A total of 4,31,271 solar lanterns, 2,06,997 solar home lighting systems, 41,776 solar street lights, 5113 solar water pumps, 6,50,000 sq. meters of solar collector area for water heating, 5,26,250 solar cookers and 3.5 MW capacity of solar power plants have so far been installed in the country. Nevertheless, it is true that the use of solar energy so far in the country is very small in relation to the potential for this. The major reasons for this are:

(i) Solar energy is a highly dispersed resource and is available in day time only. Its use requires efficient devices, many with provision to store the energy for use at nights.

(ii) The initial cost of most solar devices is high compared to conventional energy devices. This is a deterrent to users although many solar products can be competitive on a life cycle basis.

(iii) Lack of awareness among various categories of users.

(iv) Inadequate infrastructure for the distribution, sales & servicing of solar energy products.

(c) : The Ministry is implementing several programmes to promote awareness and to support the use of various solar energy devices in the country by providing fiscal and financial incentives like subsidy, soft loans, 100% accelerated depreciation, concessional duty imports and excise duty exemption on certain devices and systems. The following steps have been taken in recent years to popularize the use of solar energy :

(i) Soft loan schemes have been introduced for solar thermal and solar photovoltaic devices through the Indian Renewable Energy Development Agency (IREDA) and some banks.

(ii) A soft loan scheme for supporting photovoltaic manufacturing activities has been introduced. New schemes on solar generators and building integrated photovoltaics have also been introduced during current year.

(iii) Higher levels of subsidy are being provided to users in the North-Eastern States.

(iv) Special demonstration projects in new application areas and for developing new markets are being funded through grants.

(v) A model building bye-law for making solar assisted water heating systems mandatory in several categories of buildings has been drafted and circulated to all State Governments.

(vi) A demonstration scheme for installation of concentrating solar cookers in community kitchens is being implemented.

(vii) Solar power plants and solar home lighting systems are being used to electrify villages in remote areas.

(viii) A scheme on establishment of Aditya Solar Shops for making solar products available in major cities of the country is in operation.

(ix) The Ministry has been carrying out publicity and awareness promotion through advertisements, brochures, exhibitions, mobile vans and electronic media.

(x) R&D projects aimed at improving the efficiency, reliability and economics of solar products are being supported

(d): The various schemes of the Ministry are being implemented in the state of Gujarat by the state nodal Agency namely, Gujarat Energy Development Agency (GEDA). Projectssanctioned to GEDA underthe solar energy schemes, in the past few years relate to sale and promotion of different types of solar cookers, establishment of Aditya Solar Shops in a few cities of the State and installation of solar photovoltaic devices like solar lanterns, solar home lighting systems, solar street lights, solar water pumps, solar power plants, etc. A total of 31,603 solar lanterns, 2,552 home lighting systems, 1,764 street lights, 43 water pumps, 19,615 solar cookers and 14 kW capacity of power plants have so far been installed in the state of Gujarat under the sanctioned projects. Three Aditya solar shops sanctioned during 2001-02 are also in the process of establishment. Twenty small power systems for milk collection centers have also been installed. During the year 2002-03, 2000 solar ! home lighting systems and 200 solar street lights have been sanctioned to GEDA till date.